Hope Offered Through Principled, Ethically-Sound Stem Cell Research (HOPE) Act
S. 30

Purpose: To provide common ground on the divisive issues of stem cell research in order to protect and promote the health of human life from conception to natural death.

Bill Summary:
The Secretary may allocate funding for many types of stem cell research in which a human embryo or embryos are not destroyed, discarded, or subjected to risk of injury or death.

In addition, the HOPE Act proposes an amniotic and placental stem cell bank program. The bill directs the Institute of Medicine to conduct a study to recommend an optimal structure to be submitted to HHS and to Congress to begin the process of developing the bank.

The HOPE Act advances the science of stem cell research:

Since 2001, the Federal government has funded human embryonic stem cell research using the 21 lines made available by the President. The HOPE Act authorizes additional Federal funding for pluripotent stem cell research including certain types of embryonic stem cell research as long as they only employ methods which do not destroy, harm or create a human embryo. This bill could allow Federal funding for new stem cell lines beyond the 2001 policy.

New technologies for creating fully pluripotent cells, including some embryonic stem cells, without destroying human embryos offer a path to advancing stem cell research that everyone can support. By finding an ethical way to derive pluripotent stem cells, we can overcome the impasse and move forward without the threat of a veto.

The HOPE Act does not put human lives at risk

Embryonic stem cells are not unethical in themselves-- the way they have been derived in the past has raised legitimate ethical concerns. By finding an ethical way to derive pluripotent stem cells, we can overcome the impasse.

The HOPE Act adheres to pro life principles of protecting human life from its earliest stages. The bill utilizes the Dickey-Wicker provision, which ensures that no embryos are created, destroyed or harmed. The Dickey-Wicker provision has had the broad support of the pro life community because of its protective value for over a decade.

The HOPE Act prohibits this new federal funding to be used for cloning or creating human embryos for research purposes.

Under this bill, embryos are protected from any risk of injury in research, the same way that adults are protected today. In fact, human embryos are provided special protections under this bill, along with pregnant women, infants and fetuses.

Under this bill, many forms of stem cell research would be eligible for funding:

This research includes stem cells drawn from adults, children, umbilical-cord blood, amniotic fluid, placentas, and other non-embryonic sources that have already achieved therapeutic results in thousands of patients with many different diseases.
In addition, new research could produce pluripotent stem cells, including some embryonic stem cells, without harming embryos. In May 2005, the President's Council on Bioethics published a paper highlighting four such potential techniques. In the months since the Council's report, peer-reviewed studies on each of the approaches have been published in leading scientific journals, suggesting many opportunities for ethical creation of new stem cell lines.

One such technique would involve deriving cells from embryos that have died naturally in the course of attempts to use them in fertility treatment. A second proposed method would involve cells developed from a single cell removed from an early embryo without otherwise harming the embryo. A third would involve the engineering of an entity that is not itself an embryo but that could still yield cells like those derived from embryos. And a fourth would involve a process of chemically reprogramming an adult cell to function and behave like an embryonic stem cell. Then in January 2007, yet another promising approach was reported when researchers discovered a new and readily available source of stem cells in the amniotic fluid that cushions babies in the womb.

All of these methods and others that may be developed would be eligible for research under this bill--as long as no embryos were created, destroyed or harmed during any process.

Some of these alternative approaches are closer to clinical application than embryonic stem cell techniques (all of which are still at very early stages of investigation). In fact, some adult stem cells are already used in human therapies and hold immediate promise for further medical application. Some of the proposed alternative methods also many have scientific advantages over current embryo-destructive methods—like greater ease of culturing, the ability to genetically match the patient, and avoiding the virulent tumor formation seen with embryonic stem cells.

Frequently Asked Questions:

Question: How do we know researchers will stick to the rules? How will NIH monitor it?

Response: In the HOPE Act, there are protections to ensure that recipients of federal funding cannot hasten the death of an embryo for research purposes. The bill requires that no alteration of the timing, methods, or procedures used to create, maintain, or intervene in the development of a human embryo was made solely for the purpose of deriving the stem cells. This type of protection has been used in the law for years.

The NIH has developed a very thorough process for evaluating research and ensuring that grantees adhere to regulations and laws. This bill would build on that process, which includes education in the protection of human research participants (including an embryo), monitoring research, science reviews, audit reports and site visits.

Question: How will we know that any approach will not harm an embryo?

Response: NIH regularly reviews scientific proposals that involve human subjects. Eligible research proposals will have to demonstrate, through animal and other research, that their proposals meet the extensive ethical restrictions in this bill and in current law.

Question: How will we know that an embryo is dead? How will that be defined and who will make the decision of when an embryo is dead?

Response: The HOPE Act offers a very strong definition of death, which was reviewed by a variety of interest groups: In fact, the bill's definition of death is consistent with the definition of death in all 50 states.
Just as with all other research on human subjects, research on embryos will be extensively monitored for compliance with federal rules and regulations.